

AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0035] with the following amended paragraph:

The present invention has two significant aspects in terms of repair of fretting cracks in rotor teeth. First, the damaged material is ground out of the rotor and a local stress field is altered near the repaired ends. With reference to Figures 4 and 5, the machined area is in the wedge-receiving dovetail portion 36 of the slot wall 38. As already noted, this is the area of the slot wall that is susceptible to fretting cracks, and particularly, at the interface of two abutting steel wedges. Initially, a suitably shaped and sized machining bit (e.g., a .625 dia. bit) is used to machine the vertical slot entry surface 40 and thereafter, most of the radially outer tapered dovetail surface 42, best seen in Figures 5 and 8. The machining work creates a first concave groove 43, including groove portions 44 and 46. Note that a small area 48 (Figure 8) of the tapered surface 42 remains in its original state, and, as such, the groove portion 46 does not extend into the radial intermediate surface 47. Once the material is machined to form groove portions 44 and 46, the sharp edges along the boundaries of both portions are radiusied. Machining in this manner only minimally reduces the low and high cycle fatigue life of the rotor. Where appropriate (i.e., depending on the crack location and extent of the crack), the repair may be effected by forming the first groove portion 46 only. When the wedges are replaced, the butt joint between adjacent wedges 32, 34 may be centered on the machined regions (i.e., on the radial centerline through the groove 43, as shown in Figure 7). Alternatively, the wedge butt joint may be axially offset from the repaired area.